

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: J. Randall Hall

Examiner:

Serial No:

Group Art Unit:

Filed:

Date: September 9, 2003

For: **"METHOD FOR TUBE END PREPARATION AND MILLING HEAD
THEREFORE"**

Commissioner for Patents
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir,

The present invention relates to tube ends such as those of boiler tube banks, are prepared utilizing any of various combinations of processes which include a step of micro-diameter tube film removal from a portion of a tube end, including an area below a beveled segment, or segment to be beveled. The micro-diameter film removal step provides the tube with an exposed, clean metal surface which is conducive to a subsequent welding or bonding operation performed on the tube. Preferably, the process is performed with a tube milling tool having interchangeable milling or cutting heads. A specialized milling head is also disclosed and, in one embodiment, is at least used to perform the micro-diameter tube film removal step. Advantageously, the tube film removal milling head also removes a weld overlay on one or both sides of a tube in one embodiment. The tube film removal milling head includes an attached blade having a planar face configuration which enables tube film removal.

As authorized and encouraged under 37 C.F.R. §1.97 – 1.99, Applicant hereby cites as a means of complying with the duty of disclosure set for in 37 C.F. R. §1.56, the following patents and or documents, which the Examiner should consider with respect to the above-identified U.S. Patent Application.


US PATENTS/DOCUMENT		
PATENT/DOCUMENT NO.	DATE	NAME
4,091,699	May 30, 1978	Chaze et al.
4,192,067	March 11, 1980	Calhoun et al.
4,449,871	May 22, 1984	Hillestad
4,498,820	February 12, 1985	Brennan
4,601,222	July 22, 1986	Gill
4,633,555	January 6, 1987	Legge
4,689,920	September 1, 1987	Geise
4,718,201	January 12, 1988	Legge
4,739,688	April 26, 1988	Brennan et al.
4,743,149	May 10, 1988	Geise
4,830,551	May 16, 1989	Brennan et al.
4,872,249	October 10, 1989	VanderPol et al.
4,979,294	December 25, 1990	Bowman et al.
5,044,075	September 3, 1991	Brennan et al.
5,356,248	October 18, 1994	Hillestad
5,531,550	July 2, 1996	Moruzzi
5,542,177	August 6, 1996	Hillestad

In accordance with 37 C.F.R. §1.98(a)(2)(i) no copies of the cited references are furnished.

An official action considering the enclosed items is earnestly solicited.

Respectfully submitted,

HUDAK, SHUNK & FARINE CO. LPA



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Attorney Docket No.: H&S-L

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				Applicant: J. Randall Hall			
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U.S. PATENT DOCUMENTS/PUBLISHED APPLICATIONS							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing date, if appropriate
	AA	4,091,699	May 30, 1978	Chaze et al.			
	A8	4,192,067	March 11, 1980	Calhoun et al.			
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FOREIGN PATENT DOCUMENTS							
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	AL						
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
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